

Fig. 1

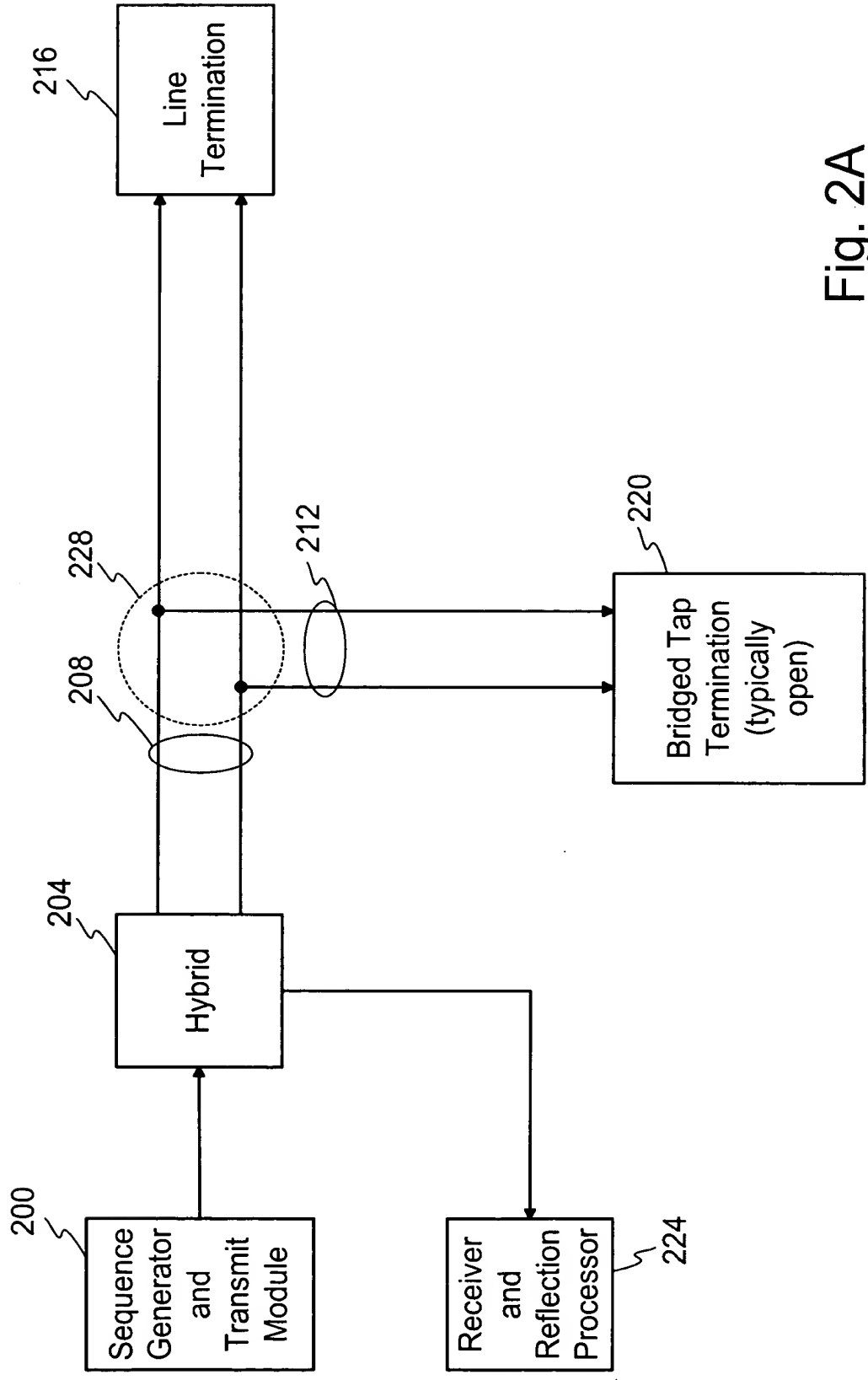


Fig. 2A

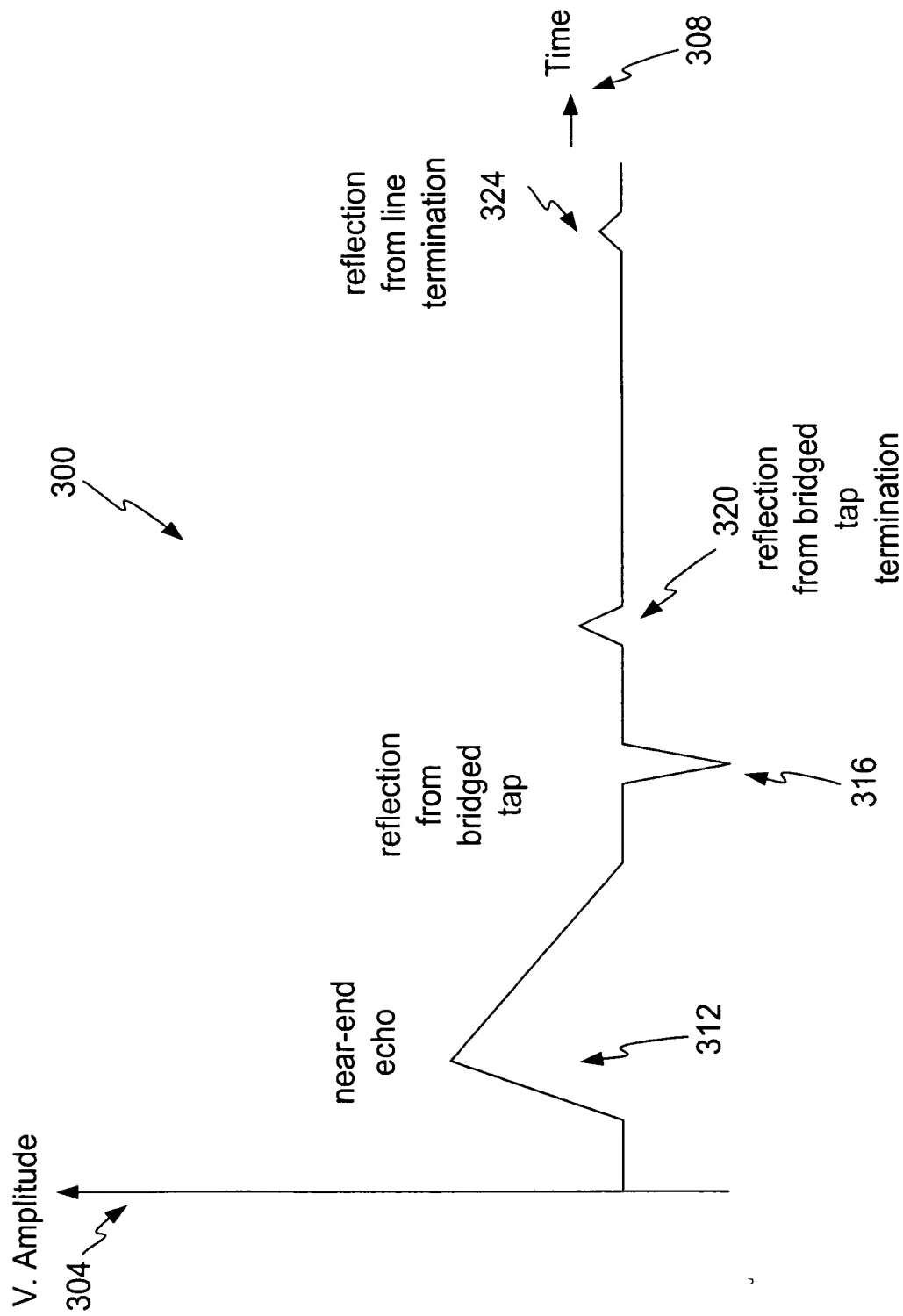


Fig. 2B

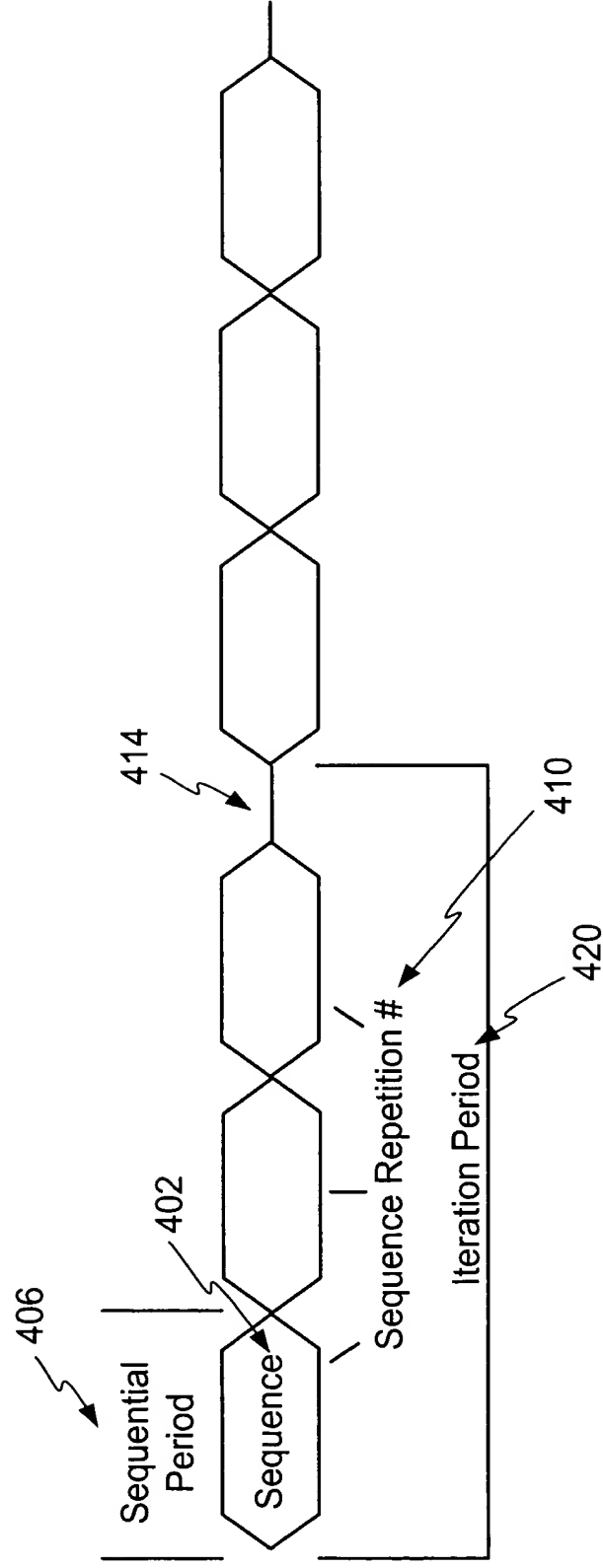


Fig. 3

FIG. 4 is a block diagram of a system 400 for processing signals. The system 400 includes a sequence generator 420, a signal mapper 422, a Tx filter 424, a DAC 426, a line interface 408, an ADC 440, an Rx filter 442, a sequence correlator 446, a calibration and artifact reduction module 448, and an analysis module 450. The sequence generator 420, signal mapper 422, Tx filter 424, and DAC 426 are connected in series to the line interface 408. The line interface 408 is connected to the ADC 440. The ADC 440, Rx filter 442, sequence correlator 446, calibration and artifact reduction module 448, and analysis module 450 are connected in series.

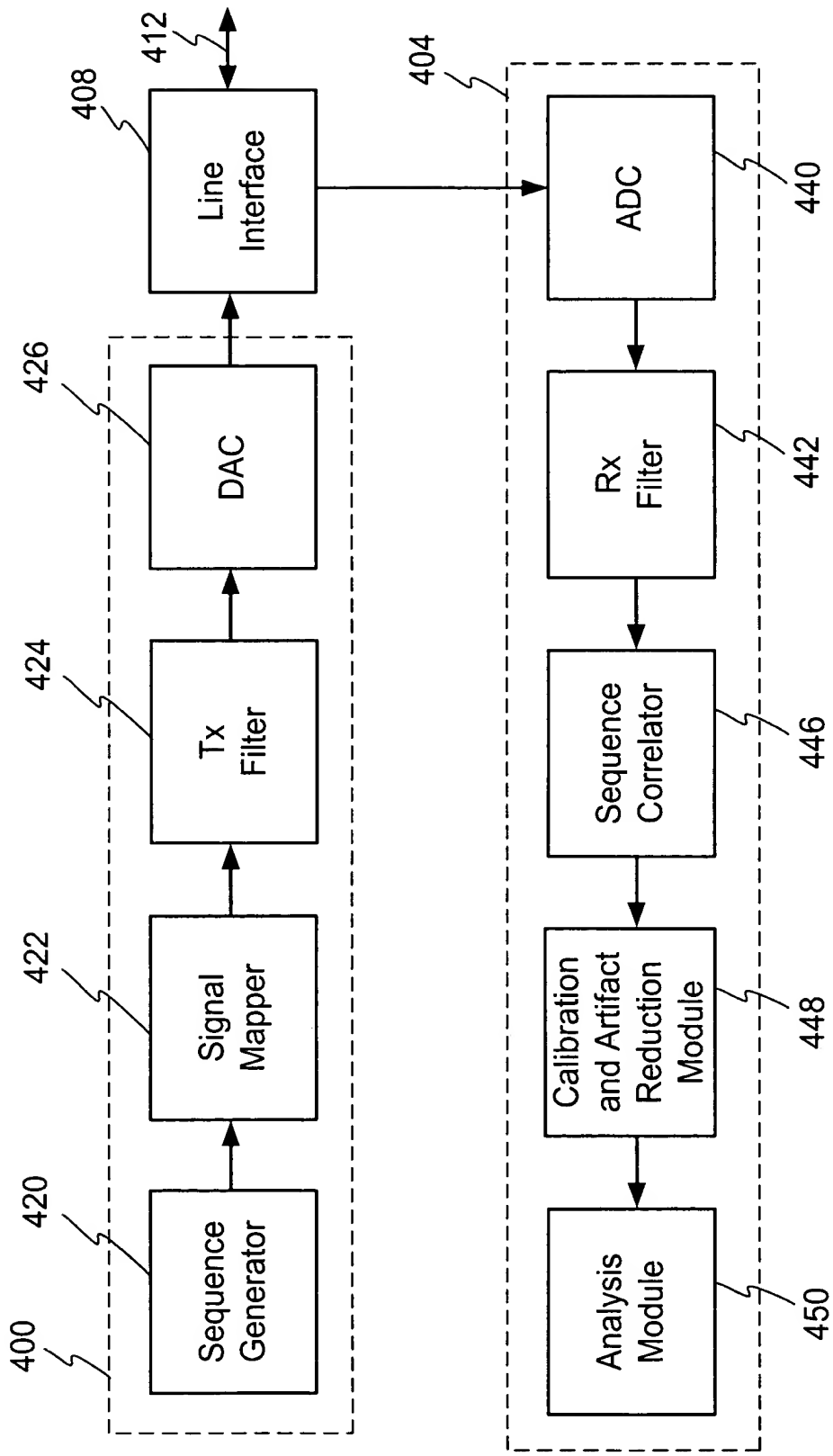


Fig. 4

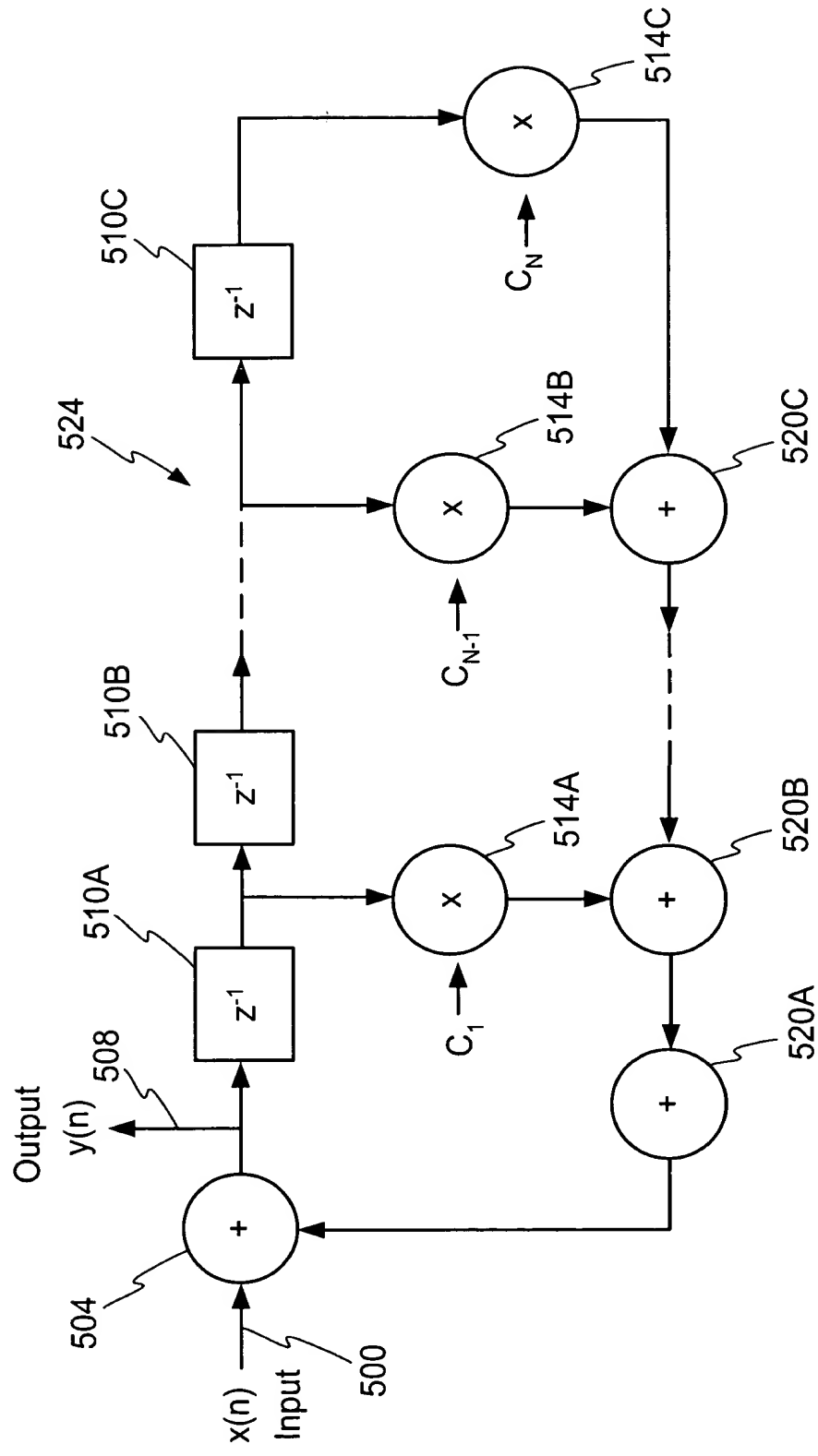


Fig. 5

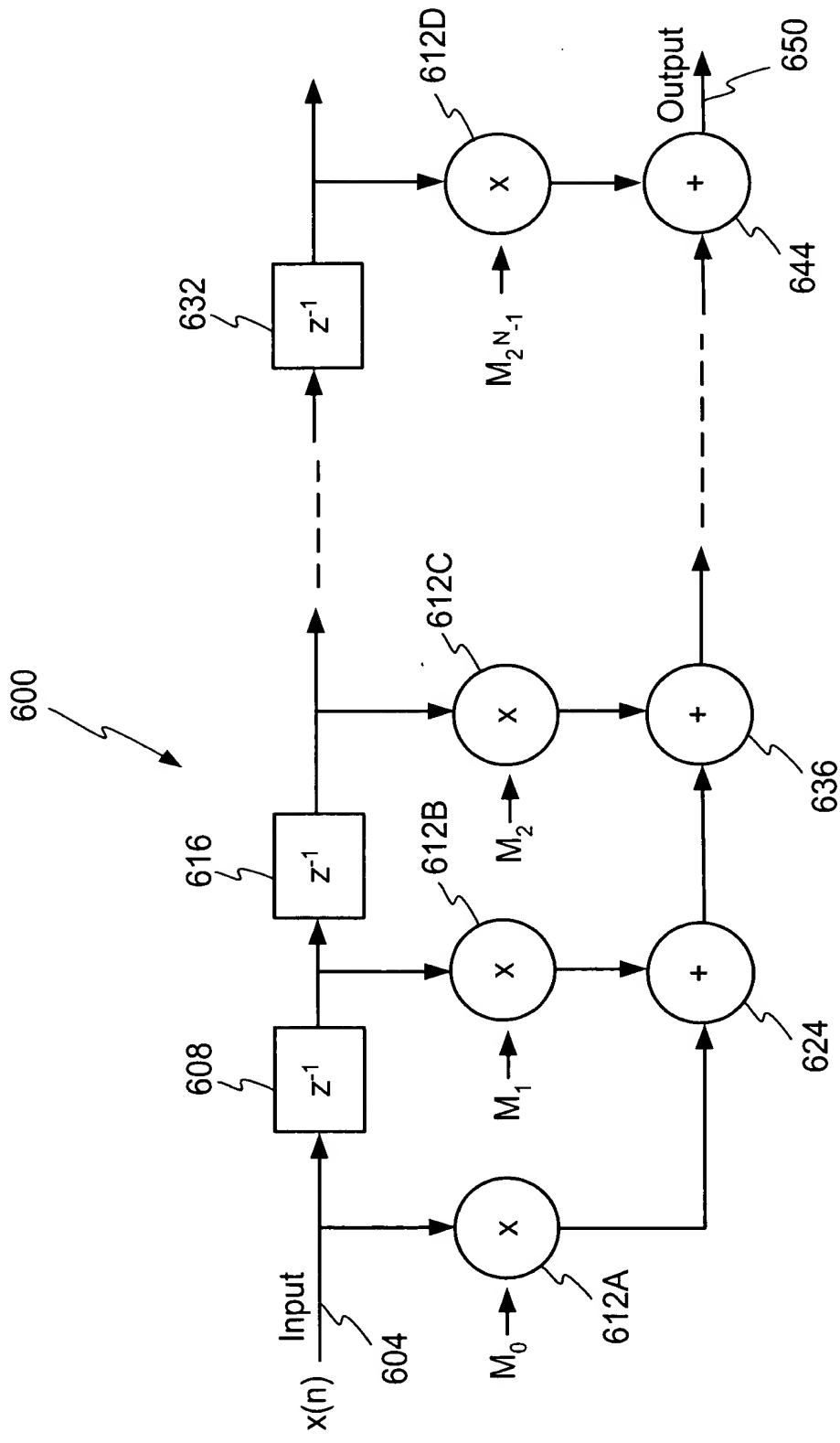


Fig. 6

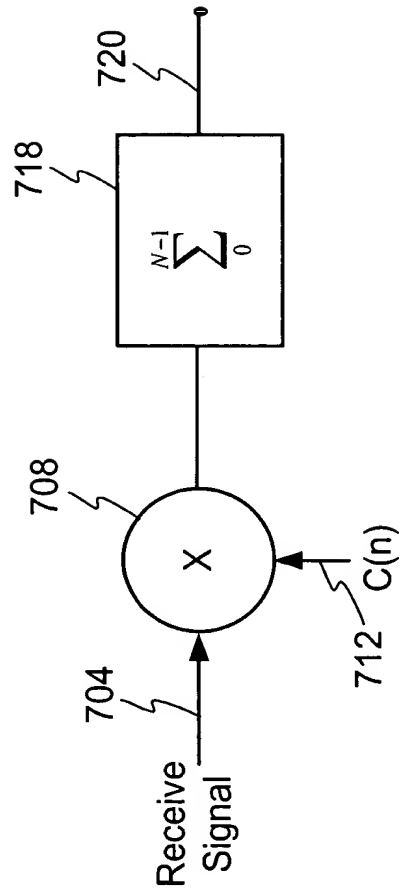


Fig. 7



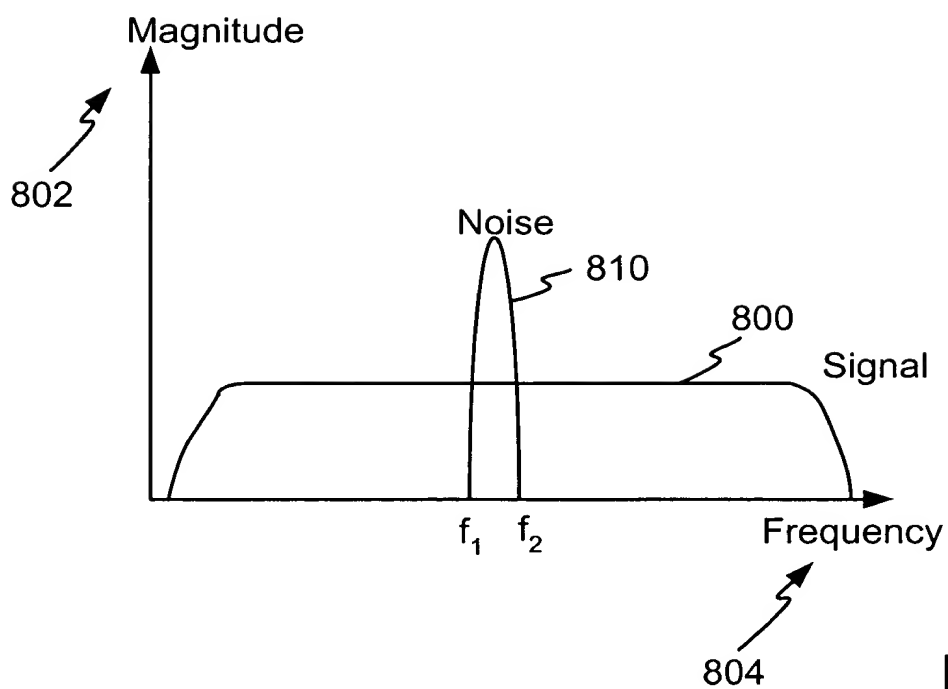


Fig. 8A

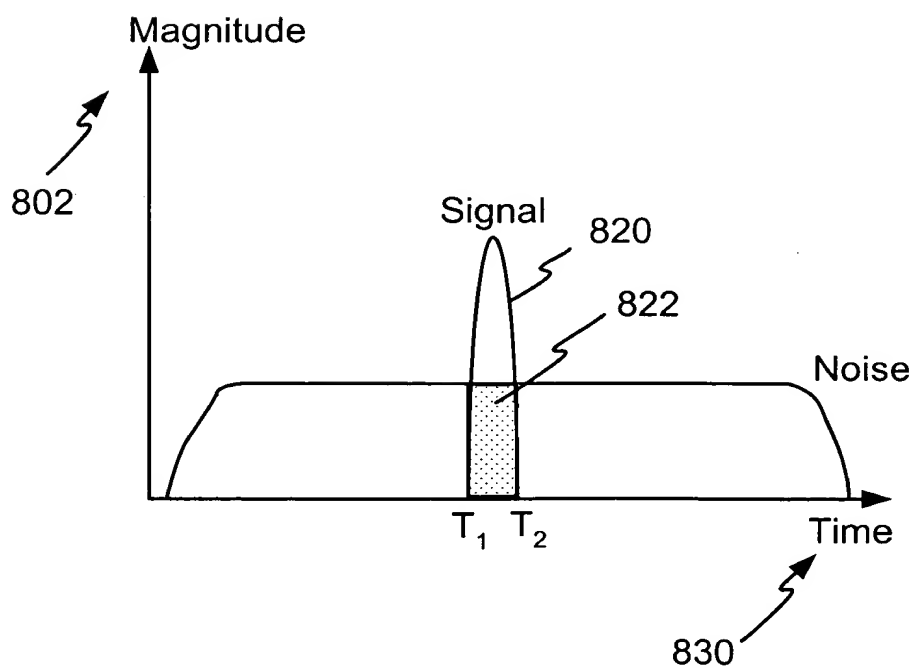


Fig. 8B

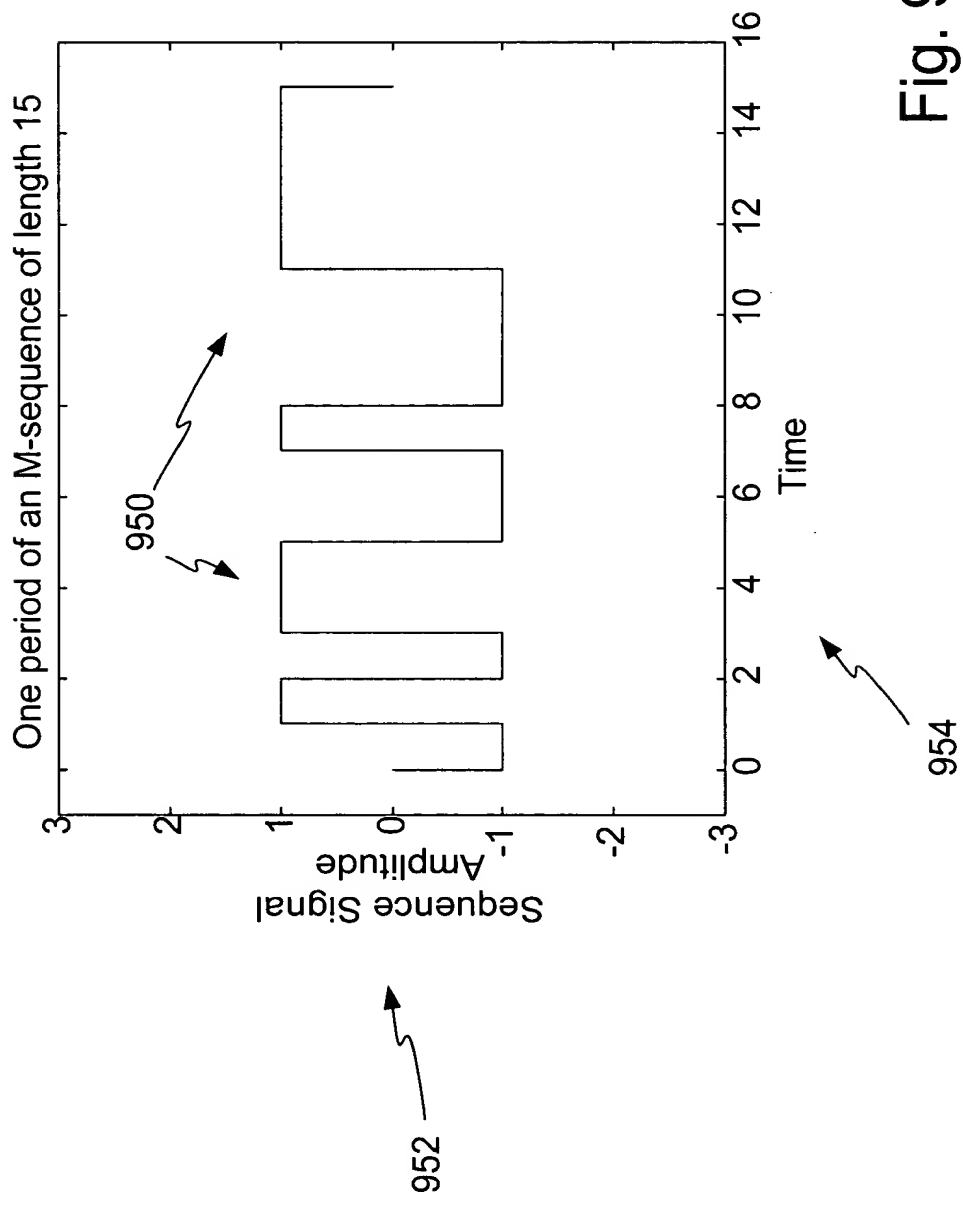


Fig. 9

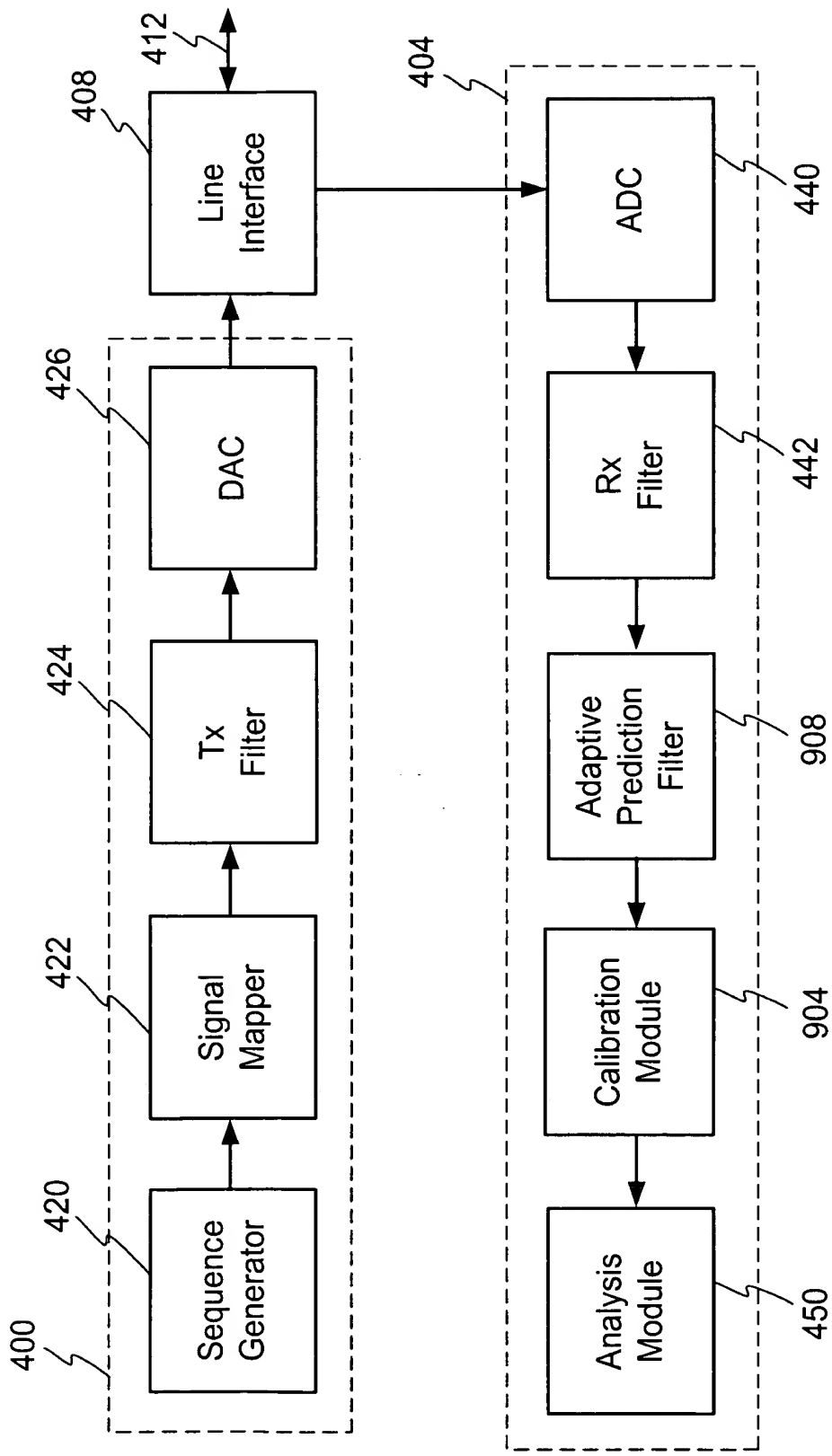


Fig. 10

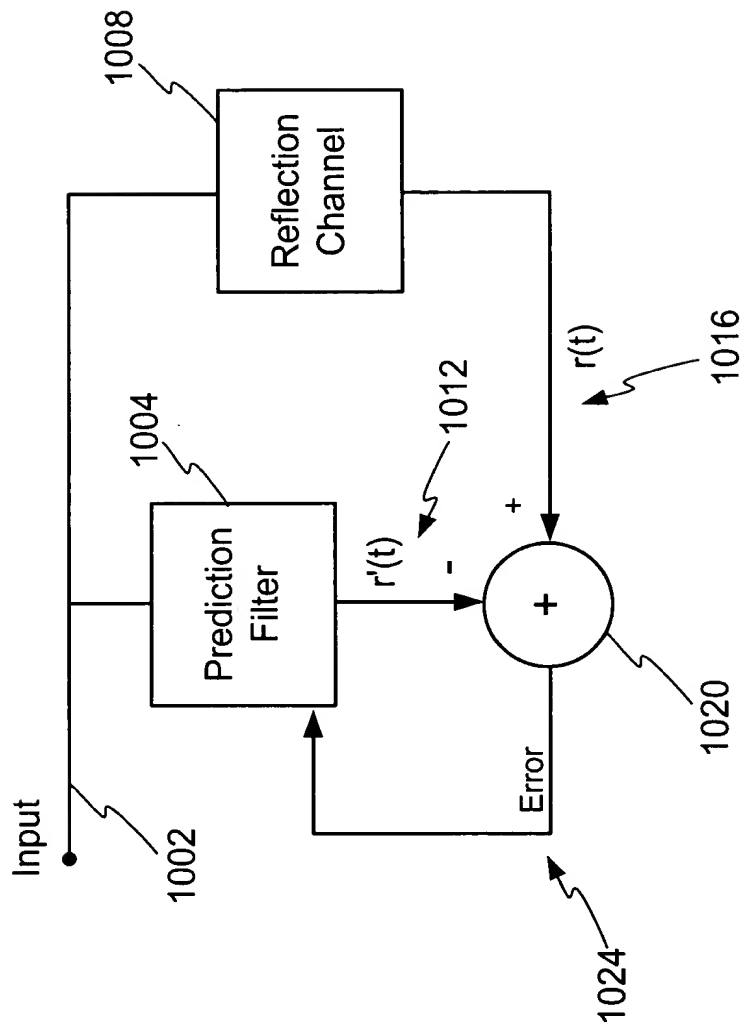


Fig. 11

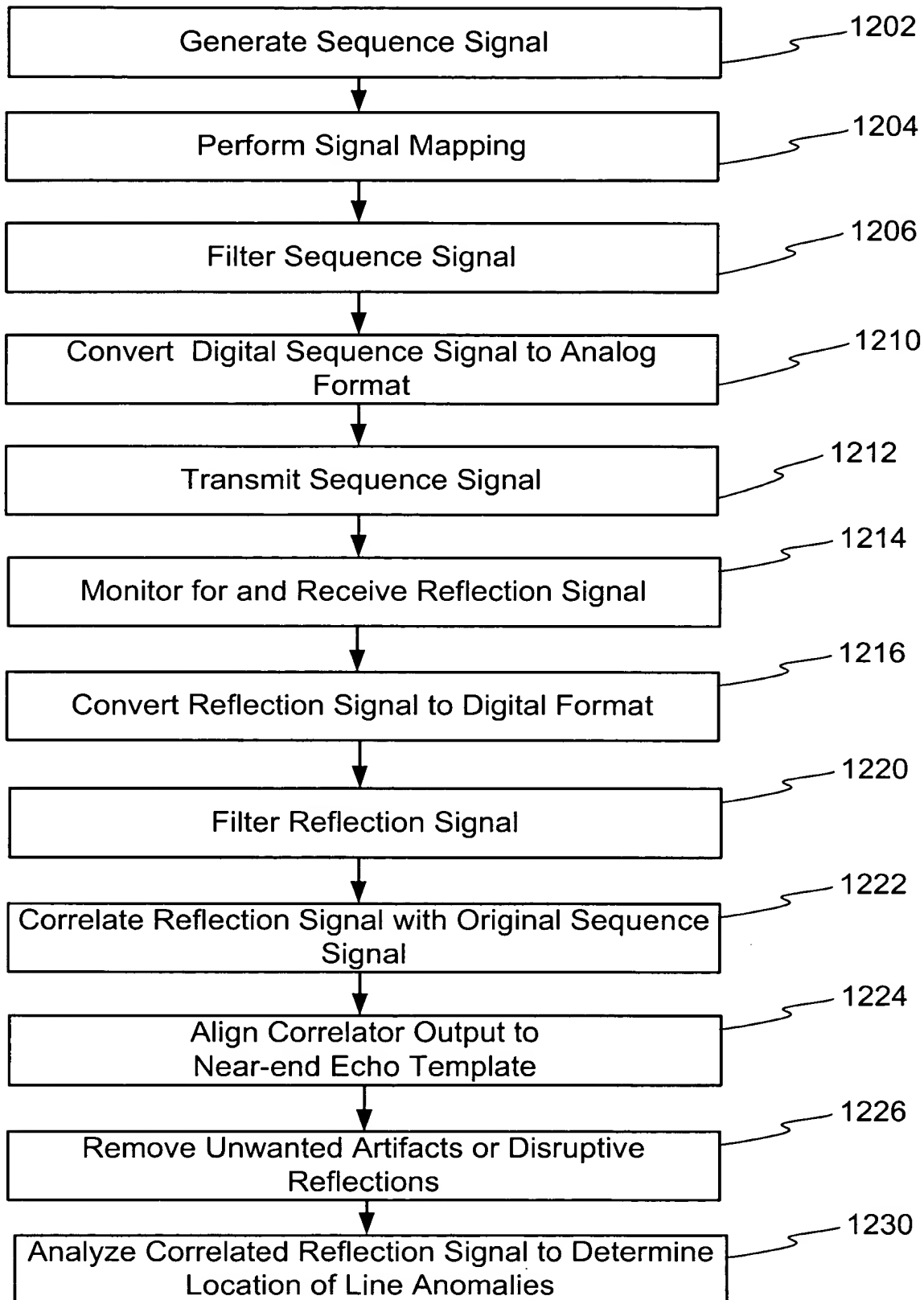


Fig. 12

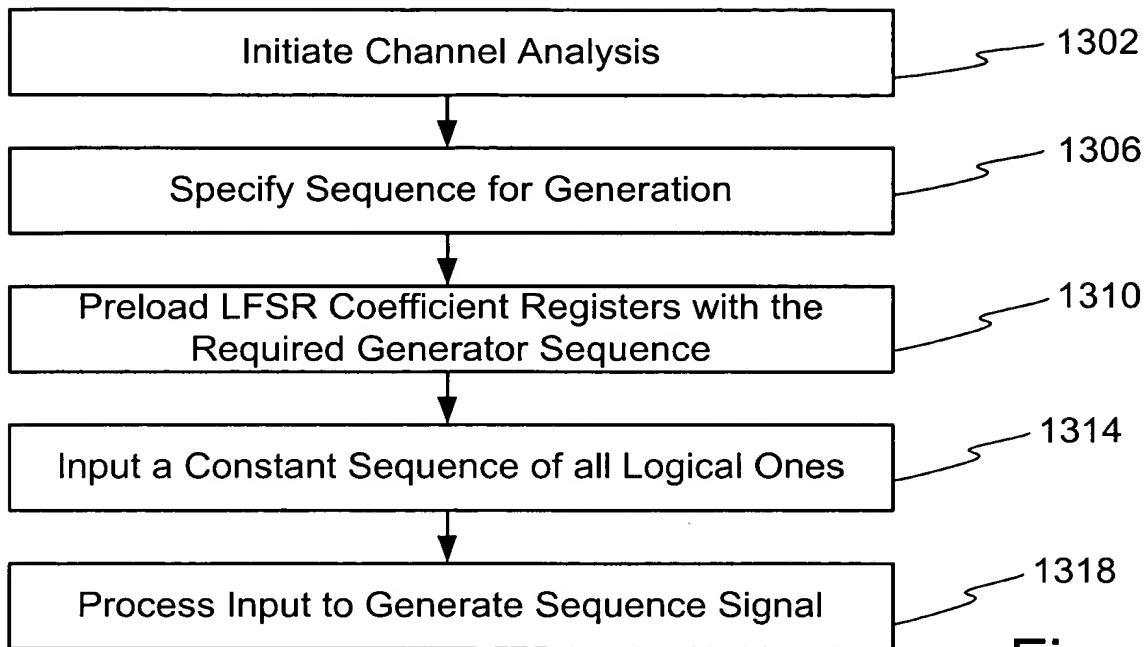


Fig. 13

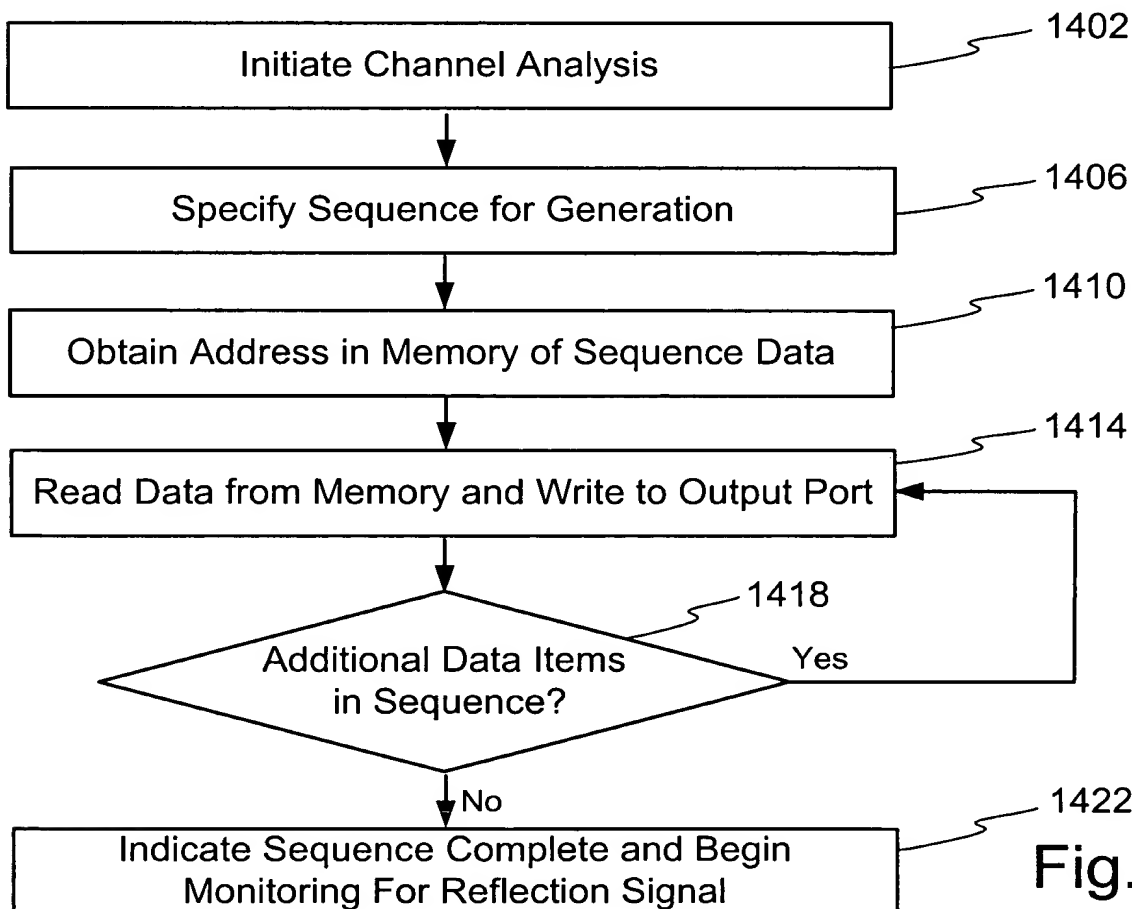


Fig. 14

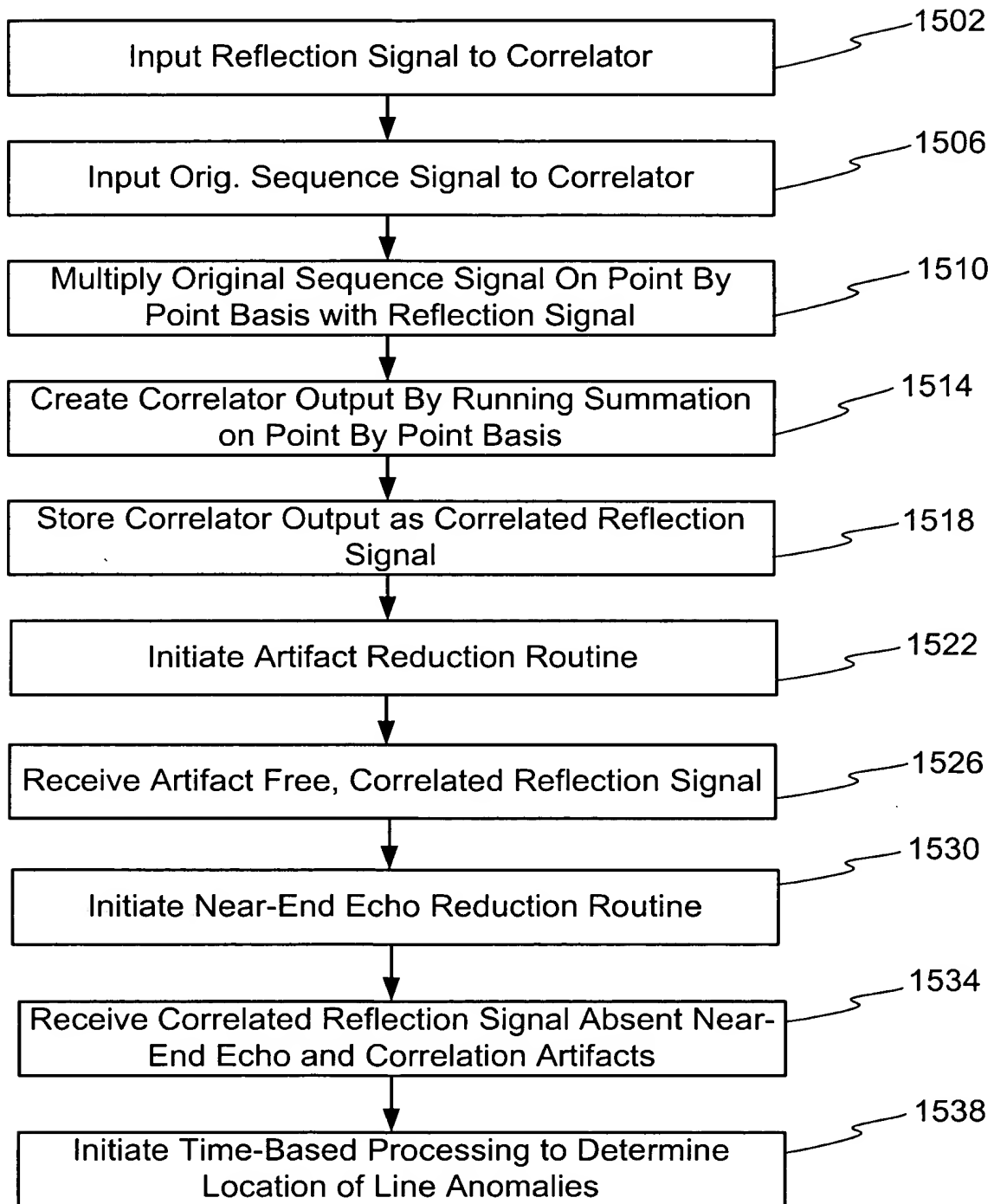


Fig. 15

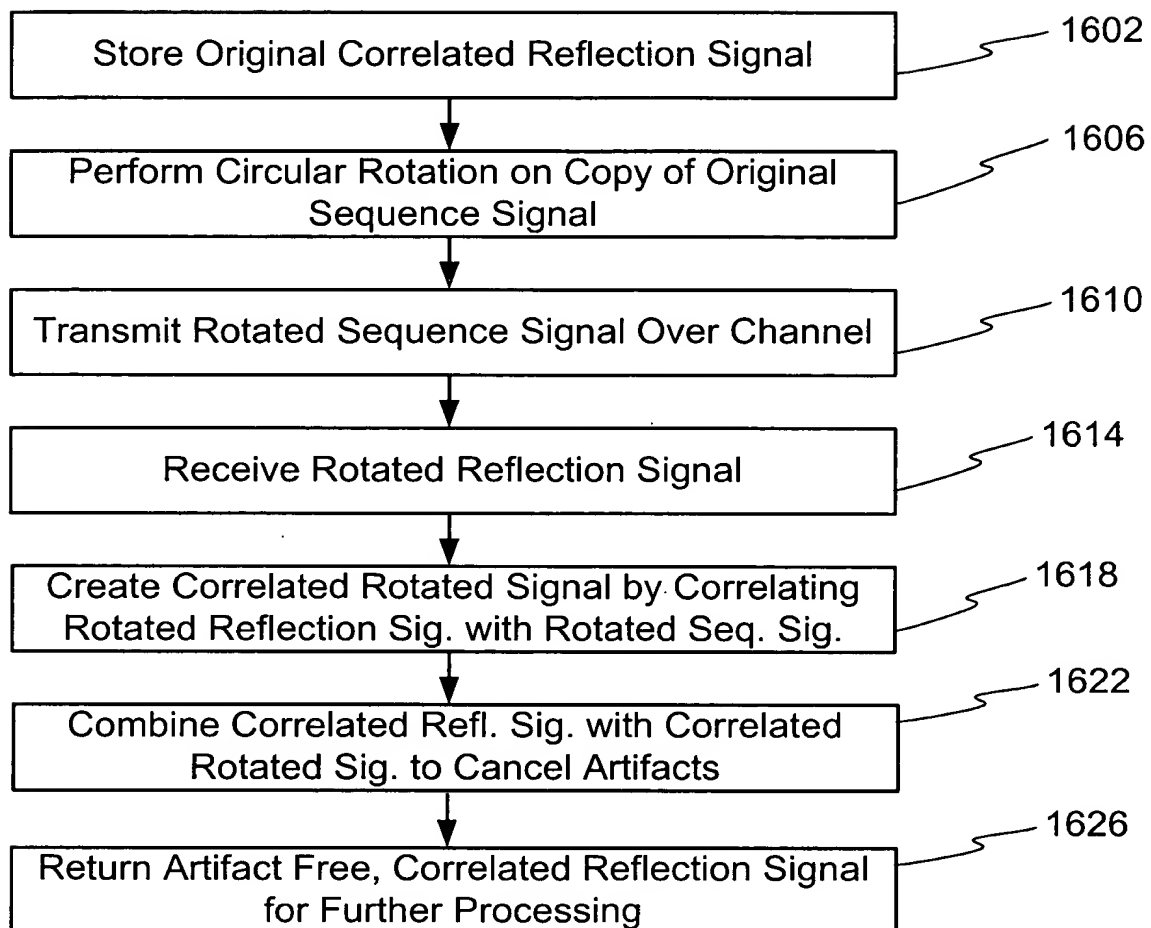


Fig. 16



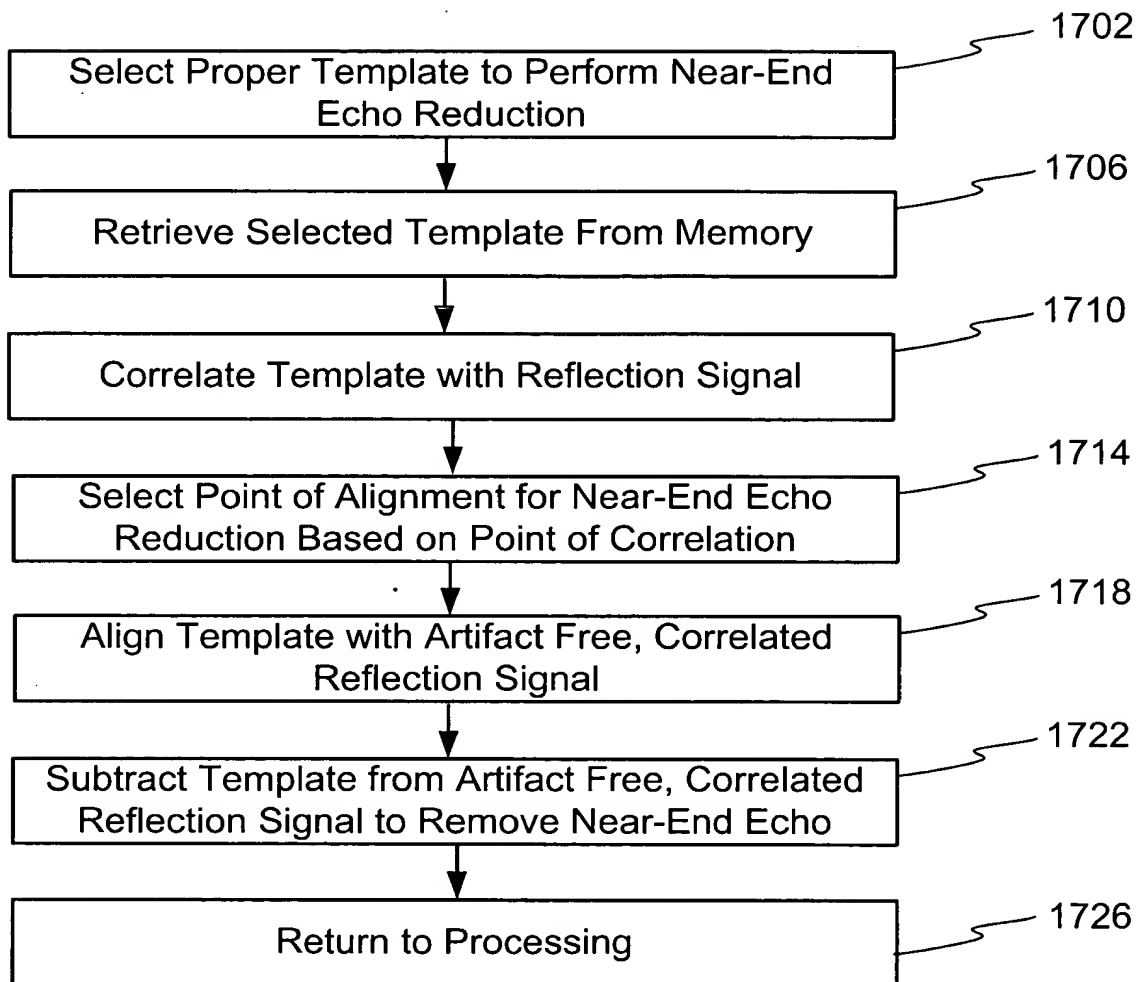


Fig. 17

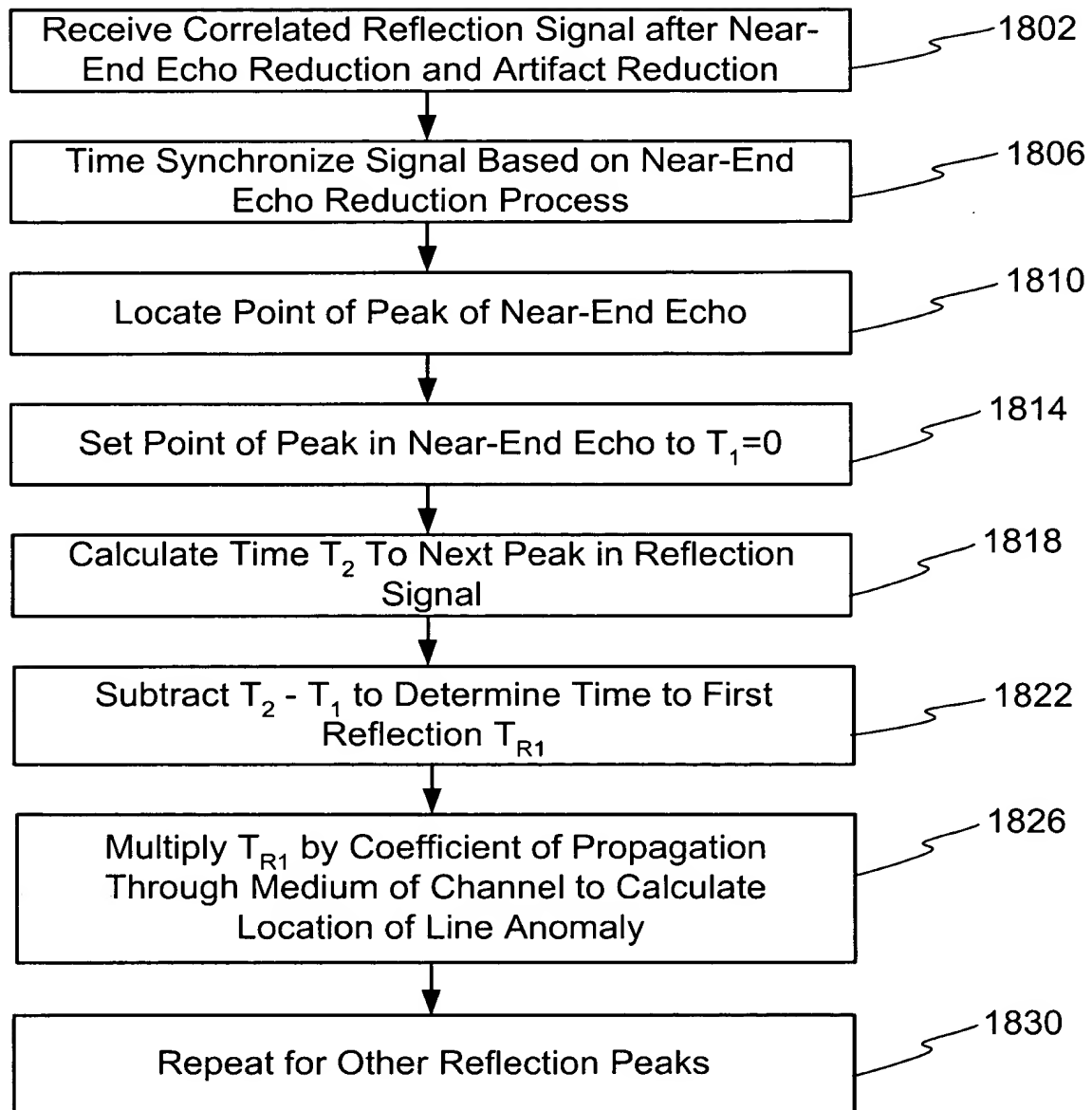


Fig. 18

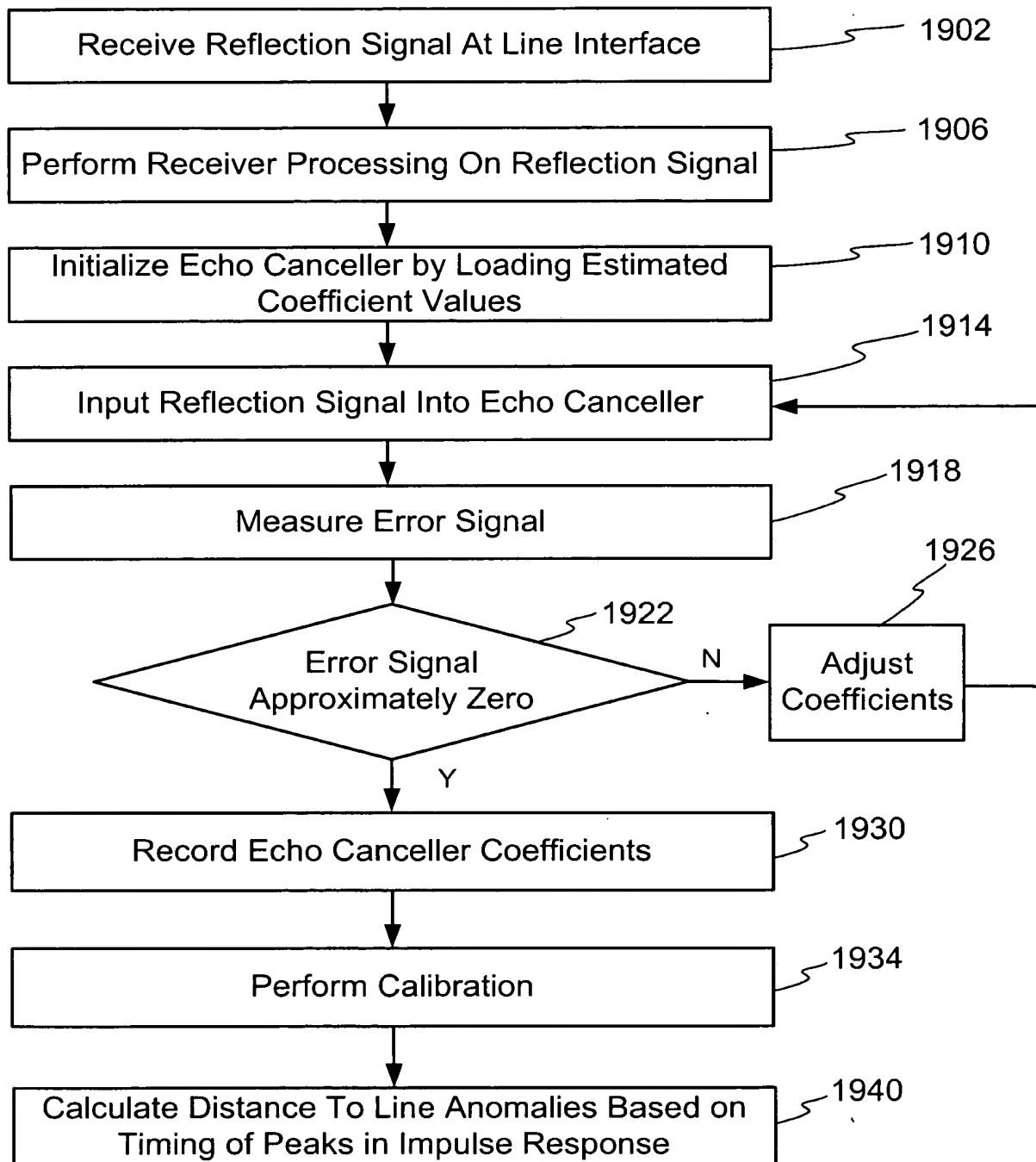


Fig. 19